Flame-Throwing Prowler

Photo by Hisashi Fujimoto
Modified

By Ltjg. Van Fitzsimmons

It was a beautiful, sunny day off the coast of North Carolina. I manned up for my third front-seat Prowler flight around the boat, flying with our operations officer, a senior pilot. Also flying with us were the assistant maintenance officer and a guest flier from the ship.

We were geared up for an exciting mission in support of simulated ground troops assaulting the evil "Koronans" on the Outer Banks. We had plenty of time to test our systems since we were scheduled to be the last plane off the deck. The taxi directors on board USS *John F. Kennedy* positioned us on cat 4, and, after a final wipeout of the controls and a salute to the shooter, we were in the air. My pilot raised the gear and waited until we passed 185 knots to raise the flaps and slats. "Moving right," I said.

"Left," he replied.

I looked toward the integrated position indicator and saw the slats still indicated barber poled. The pilot momentarily pulled back on the stick and then executed a slat bunt. Generally, it is no surprise when the slats fail to indicate fully retracted; it happens routinely, and pilots instinctively correct for it. However, on this day, the slats did not retract after the slat-bunt maneuver. We put a little more altitude between the ocean

and us and tried again—nothing. I reached for the pocket checklist (PCL) as the pilot said, "Break it out."

The PCL read: "FLAPS/SLATS FAIL TO RETRACT"—page 20, and I began to read it aloud.

The pilot continued to climb to 10,000 feet to troubleshoot, as I went through the checklist telling him what to do. As we dealt with our problem, we felt a little shudder that seemed to come from the right side of the aircraft. It may have been a chug, a sign of a compressor stall, or one of the drop tanks beginning to transfer. At that point, I was too engrossed in the first emergency. I reached step 13, which called for us to fully cycle the flaps and slats. When we did this, the slat problem was corrected. With one crisis averted and a second assessed to be minor, we continued the mission.

I called our representative in the tower and told him what was going on and that we were going to continue with the mission. In the back of my mind, I remembered what the skipper had said earlier, "Today would be the worst of all days to divert because the boat is heading east in the morning."

Bang! A second chug, and this one was much worse than the first. I felt the jet roll left as the pilot said, "We're going home."

Seventy miles from the ship and 100 miles from our divert, MCAS Cherry Point, we were in a tough position. The boat still was launching aircraft, so we would have to circle overhead for 20 minutes before landing or head to Cherry Point, where the jet would be down and unable to get back to the ship before the translant.

The pilot set the throttles at 80 percent, and we headed to mother. I once again was reading from the PCL, this time for a single-engine approach. Our plan was to make a constant-power descent to 2,000 feet and then setup for an eight-mile straight-in to the ship. Since we didn't know how the engine would respond to throttle movements once we called the ball, we briefed a single-engine approach in case the engine failed on final. The air boss told us to charlie, so we gradually descended and positioned ourselves for the approach.

The gear and flaps came down without any problems. The pilot kept up the power on the starboard motor until 2.0 miles, when he pulled power to achieve on-speed. From then on, each time the throttles were moved the starboard engine sounded like it was making popcorn. Instead of making VSI calls, I was saying, "Tapes and gauges are good," over and over. After an OK-underlined pass into the 3-wire, paddles told us to secure our starboard engine, "Now!"

Everyone watching our approach knew we had serious engine problems. The PLAT camera showed numerous flashes as our engine went through its death throes before seizing on deck. The LSO later said that, with each engine chug, a huge flame was thrown aft of the aircraft tail. To complicate matters, the slats again refused to retract as we cleaned-up in the landing area, leaving us stiff-wing and in the way. The flight deck scrambled to make room for a Prowler that now was twice as wide. Finally, we cleared the LA and taxied to our line crew, who eagerly began to repair our jet.

The investigators still are determining whether the engine failure was because of FOD or if it was a component failure. There is no procedure for this type of emergency around the carrier. At Whidbey, it's an easy decision to bring the jet back to the base and land, but around the boat, there are other considerations: Is the deck ready, do I have enough fuel to hold or divert, and is there a divert available? We discussed these considerations at our next aircrew meeting and put together a decision-matrix to aid crews in responding to engine chugs. Ultimately, I was comforted to know most of the squadron aircrew would have done what we did.

> *In the back of my mind, I remembered what the skipper had said earlier...*

Ltjg. Fitzsimmons flies with VAQ-140.